

### REMARKS

Applicants respectfully request reconsideration and allowance of their reissue application.

#### **The claims, including the amended claims**

The claims are supported by the original specification and there is no new matter.

Reissue claims 22 and 23 are presented with underlining pursuant to 37 CFR 1.173(d).

Claims 22 and 23 include recitation that the oil soluble molybdenum compound is free of phosphorus and free of active sulfur.

Amended claims 22 and 23 correct an editorial oversight in the wherein clause consistent with previous and still pending claims. Amended claim 22 refers to the oil soluble molybdenum compound being present in an amount to be effective as an antioxidant. (The prior amendment at pages 12-13 refers to Applicants' molybdenum compound having support in the specification, and it may be understood as referring to the molybdenum provided by the molybdenum compound.) The amended claim finds basis in the specification as a whole, including column 15, lines 11-53. As the specification describes, an amount of molybdenum from the oil soluble molybdenum compound of about 52 ppm (Table 5) showed a high viscosity increase in the stability test, which means that it was comparatively unstable and prone to oxidation. This evidence is germane because the PCT WO95/07962 ("Richie"), cited by the Examiner in the Office Action at the bottom of page 8, mentions use of 40 ppm of molybdenum from a molybdenum compound in Example 7.<sup>1</sup> (Applicants

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<sup>1</sup> The "Richie" reference is the PCT counterpart of "Ritchie" U.S. Patent No. 5,994,277. The "Ritchie" references report comparatively poorer, unacceptable, results for Example 7 versus their copper-containing three component systems. The "Ritchie" references conclude "[t]he results show that the three component anti-oxidant system ... gives an oxidation inhibition greater than that predicable from the results obtained for the individual components, or combinations of two of the components." Clearly, the Ritchie group did not recognize the results obtainable with the subject matter claimed in the present application for reissue.

correct their prior Remarks at page 4 to the extent that the expression “of molybdenum from” was inadvertently omitted. Applicants apologize for any inconvenience to the Examiner.) The amount in the “Ritchie” Example 7 would not have suggested the subject matter of claim 22, which recites the oil soluble molybdenum compound is in an amount to be effective as an antioxidant.

Amended claim 59 depends from claim 22 and states the molybdenum provided by the oil soluble molybdenum compound is at least about 104 ppm, which is supported by the specification at column 15, lines 11-53, including Table V.

Amended claim 60 depends from claim 22 and states that the molybdenum provided by the oil soluble molybdenum compound is at least about 156 ppm, which is supported by the specification at column 15, lines 11-53, including Table V.

Amended claim 61 depends from claim 22 and states that the molybdenum provided by the oil soluble molybdenum compound is about 468 ppm, which is supported by the specification at column 15, lines 11-53, including Table V. The specification discloses amounts of molybdenum provided by the oil soluble molybdenum compound greater than 450 ppm.

Amended claims 62 and 63 have their preambles corrected to refer to lubricating composition and have been revised so that the respective lubricating compositions are free of the recited supplemental antioxidants. Claims 62 and 63 refer to the composition being free of the listed supplemental antioxidants. This is supported in the specification at column 3, lines 16-19 and column 7, lines 46-48.

#### **Substantially-free of active sulfur**

The prior Office Action at page 6 in bold face type presented the assertion that ‘substantially free’ of sulfur means “the molybdenum compound contains less than 0.5% **(50000 ppm)** by weight of the material in question.” (Emphasis supplied). This is mistaken. The specification states at column 3, lines 37-40 “[b]y substantially free we mean that the molybdenum compound contains less than 0.5% by weight of the material in question, *e.g.* active sulfur which is generally an insufficient amount to add significantly to corrosion.” Mass conservation means the amount of active sulfur can not exceed the amount of

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molybdenum compound, especially since substantially free of active sulfur means the molybdenum compound contains less than about 0.5% by weight of active sulfur. (As to claim 22, the amount of molybdenum provided by the oil soluble molybdenum compound is based on the disclosure in the specification, including column 3, column 5, column 8, and column 15, among other passages. As to claim 23, the amount of molybdenum provided by the oil soluble molybdenum compound is about 100 ppm to about 450 ppm.)

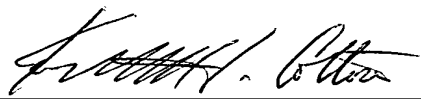
Applicants respectfully solicit reconsideration followed by favorable action.

If the Examiner has any questions, please contact the undersigned.

Notice to the above effect is earnestly solicited.

Respectfully submitted,

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**APPENDIX**

Reissue Claims in this amendment:

The below amended claims are to be added in this reissue application:

81 22. A lubricating composition comprising:

a major amount of lubricating oil,

at least one oil soluble molybdenum compound that is free of phosphorus and free of active sulfur, and

at least one oil soluble secondary diarylamine,

wherein the ratio of molybdenum provided by said oil soluble molybdenum compound relative to said oil soluble secondary diaryl amine is about 0.02 to 0.6 parts by weight molybdenum per part of said secondary diarylamine, said oil soluble secondary diarylamine is present in an amount of about 750 to about 5,000 parts per million of said lubricating composition, said oil soluble molybdenum compound is present in an amount to be effective as an antioxidant.

23. A lubricating composition comprising:

a major amount of lubricating oil,

at least one oil soluble molybdenum compound that is free of phosphorus and free of active sulfur, and

at least one oil soluble secondary diarylamine,

wherein the ratio of molybdenum provided by said oil soluble molybdenum compound relative to said oil soluble secondary diaryl amine is about 0.02 to 0.6 parts by weight molybdenum per part of said secondary diarylamine, said oil soluble molybdenum compound is present in an amount of about 100 to 450 parts per million of said lubricating composition.

82 59. A lubricating composition according to claim 22, wherein said oil soluble molybdenum compound provides at least about 104 ppm of molybdenum.

60. A lubricating composition according to claim 22, wherein said oil soluble molybdenum compound provides at least about 156 ppm molybdenum.

61. A lubricating composition according to claim 22, wherein said oil soluble molybdenum compound provides about 468 ppm molybdenum.

62. A lubricating composition according to claim 22, wherein said lubricating composition is free of a supplemental antioxidant selected from the group consisting of sulfurized phenols, sulfurized olefins, dialkyl dithiocarbamates, and phenothiazines.

63. A lubricating composition according to claim 23, wherein said supplemental antioxidants include a member selected from the group consisting of sulfurized phenols, sulfurized olefins, dialkyl dithiocarbamates, and phenothiazines.

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